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EXAMINER

MAHMOOD, REZWANUL

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2164

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,998

Applicant(s)

YAGAWA, YUICHI

Examiner

Rezwanul Mahmood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-12, 14, 15 and 18-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12, 14, 15 and 18-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the communication received on April 2, 2007.

Response to Amendment

2. Claims 4, 13, 16, 17, 27 and 28 have been cancelled.
3. Claims 1-3, 5-12, 14, 15 and 18-26 are currently pending in this office action.

Response to Arguments

4. Applicant's arguments filed on April 2, 2007 have been fully considered but they are not persuasive for the following reasons:

In response to applicant's argument on pages 9-12, *a prima facie case of obviousness* is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. Once such a case is established, it is incumbent upon appellant to go forward with objective evidence of unobviousness. In re Fielder, 471 F.2d 640, 176 USPQ 300 (CCPA 1973).

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification.

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Reference is made to MPEP 2144.01 - Implicit Disclosure

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"[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968)

Subsequent to an analysis of the claims it was revealed that a number of limitations recited in the claims belong in the prior art and thus encompassed and/or implicitly disclosed in the reference (s) applied and cited. It is logical for the examiner to focus on the limitations that are "crux of the invention" and not involve a lot of energy and time for the things that are not central to the invention, but peripheral. The examiner is aware of the duties to address each and every element of claims, however, it is also important that a person prosecuting a patent application before the Office or an stakeholders of patent granting process make effort to understand the level of one of ordinary skill in the (data processing) art or the level one of skilled in the (data processing) art, as encompassed by the applied and cited references. The administrative convenience derived from such a cooperation between the attorneys and examiners benefits the Office as well the patentee.

In response to applicant's argument, to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

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"Test of obviousness is not whether features of secondary reference may be bodily incorporated into primary reference's structure, nor whether claimed invention is expressly suggested in any one or all of references; rather, test is what combined teachings of references would have suggested to those of ordinary skill in art."

In re Keller, Terry, and Davies, 208 USPQ 871 (CCPA 1981).

"Reason, suggestion, or motivation to combine two or more prior art references in single invention may come from references themselves, from knowledge of those skilled in art that certain references or disclosures in references are known to be of interest in particular field, or from nature of problem to be solved;" Pro-Mold and Tool Co. v. Great Lakes Plastics Inc. U.S. Court of Appeals Federal Circuit 37 USPQ2d 1626 Decided February 7, 1996 Nos. 95-1171, -1181

"[q]uestion is whether there is something in prior art as whole to suggest desirability, and thus obviousness, of making combination." Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al. U.S. Court of Appeals Federal Circuit 221 USPQ 481 Decided Mar. 21, 1984 No 83-1178.

In this case, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have produced profile information for a data file that is stored in a storage system to have an apparatus or method of provisioning and managing storage using storage provisioning policies (Gajjar: Paragraph 6, lines 1-3).

Applicant argues that the cited references do not teach or even suggest the features "producing profile information for data objects stored in a data storage

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system...communicating profile information to a second data storage system...
selectively copying files using content-based profile information".

Examiner respectfully disagrees all of the allegations as argued. Examiner, in his previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111 [R-1]

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Gajjar teaches in Paragraphs 7-9 producing storage profile information for data objects stored in a data storage system and provisioning and comparing the storage attribute data with one or more storage devices. Baxter teaches in paragraph 7 copying selected files to a second storage based on selection criteria.

In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Action.

For the above reasons, Examiner believed that rejection of the last Office action was proper.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-12, 14, 15 and 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baxter 9US Publication 2003/0229637) in view of Gajjar (US Publication 2002/0174306).

7. With respect to claim 1 Baxter discloses a method for distributing data among a plurality of data storage systems comprising:

receiving a selection indication from said second data storage system, wherein the selection indication is based upon selection criteria maintained at second data storage system (Baxter: Paragraph 7, lines 1-15);

However, does not explicitly disclose:

producing profile information for a first data object that is stores in a first data storage system, said profile information comprising content-based information associated with said first data object;

The Gajjar reference, however, discloses producing profile information for data stored in a storage system, said profile information comprising content-based information associated with said data (Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to combine the teachings of Gajjar with the teachings of Baxter to produce profile information for data stored in a storage medium for provisioning and managing storage using storage provisioning policies (Gajjar: Paragraph 6, lines 1-3).

Baxter in view of Gajjar discloses:

communicating said profile information to at least one second data storage system (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 8, lines 1-14; Paragraph 9, lines 1-14); and

selectively copying said first data object to said second data storage system based on said selection indication and said profile information (Baxter: Paragraph 7, lines 1-15),

wherein said first data object is copied to said second data storage system depending on content-based information associated with said first data object (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 8, lines 1-14; Paragraph 9, lines 1-14).

8. With respect to claim 2, Baxter in view of Gajjar discloses the method of claim 1 wherein said first data storage system comprises a server component in communication with a data storage component (Gajjar: Figure 1).

9. With respect to claim 3, Baxter in view of Gajjar discloses the method of claim 3 wherein said second data storage system comprises a server component in

communication with a data storage component (Gajjar: Figure 1; Baxter: Figure 1).

10. Claims 5-12, 14, 15 and 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baxter (US Publication 2003/0229637) in view of Gajjar (US Publication 2002/0174306) and further in view of Wisner (US Publication 2002/0163910).

11. With respect to claim 5, Baxter in view of Gajjar discloses the method of claim 1 further comprising:

However, does not explicitly disclose:

receiving at said first data storage system a selection indication from each of a plurality of second data storage systems.

The Wisner reference, however, discloses receiving at said first storage system a selection indication from each of said second data storage systems (Wisner: Paragraph 57, lines 1-14; Figure 1).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to combine the teachings of Wisner with the teachings of Gajjar and Baxter to have received at said first data storage system a selection indication from each of said second data storage systems to provide a more efficient system and method for ensuring the reliability and integrity of data and network resources (Wisner: Paragraph 7, lines 1-3).

Baxter in view of Gajjar and in further view of Wisner discloses:

wherein said selection indication is an interest metric (Wisner: Paragraph 57, lines 1-14; Figure 1; Gajjar: Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Here one or more storage devices are provisioned using one or more storage provisioning policies containing storage attribute which inherently are interest metrics);

producing an ordered set of said plurality of second data storage systems, ordered according to said interest metric (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1); and

communicating said first data object to the first N of said second data storage systems in said ordered set (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

12. With respect to claim 6, Baxter in view of Gajjar and further in view of Wisner discloses the method of claim 1, wherein said selection indication is an interest metric, said method further comprising:

communication said first data object to a second data storage system if its interest metric exceeds a predetermined threshold (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

13. With respect to claim 7, Baxter in view of Gajjar and further in view of Wisner discloses the method of claim 1, wherein said selection indication indicates whether or not to communicate said first data object to said second data storage system (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

14. With respect to claim 8, Baxter in view of Gajjar and further in view of Wisner discloses the method of claim 1 wherein if said first data object is not copied to a second data storage system, then determining a replication site from among said second data storage systems independently of content of said first data object and copying said first data object to said replication site (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

15. With respect to claim 9, Baxter in view of Gajjar and in further view of Wisner discloses the method of claim 18 wherein said selection criteria are stored in said first data storage system, said method further comprising communicating said first data object to said second data storage system based on said profile information and on said selection criteria (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

16. With respect to claim 10, Baxter in view of Gajjar and in further view of Wisner discloses the method of claim 9 further comprising additional selection criteria for an additional second data storage system, said method further comprising communication said first data object to said additional second data storage system based on said profile information and said additional selection criteria (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

17. With respect to claim 11, Baxter in view of Gajjar and further in view of Wisner discloses the method of claim 18 wherein said selection criteria are stored in a selection server system separate from said first data storage system and from said second data storage system, said method further comprising:

communicating said profile information to said selection server system (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1); and

receiving a selection indication from said selection server system (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1),

wherein said first data object is selectively communicated to said second data

storage system depending on said selection indication (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

18. With respect to claim 12, Baxter in view of Gajjar and in further view of Wisner discloses a distributed data storage system comprising a plurality of data servers, each data server comprising:

- a client interface component configured for communication with one or more clients to exchange data (Gajjar: Figure 1; Wisner: Figure 1);

- a data storage interface component configured for data communication with a data storage component (Gajjar: Figure 1; Wisner: Figure 1); and

- a data processing component configured to:

 - producing profile information associated with a first data object that is stored in said data storage component, said profile information comprising content-based information associated with content of said first data object (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1);

 - communicating said profile information to a plurality of candidate data servers (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1);

 - receive a selection indication from each of said candidate data servers

(Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1); and

copy said first data object to one or more of said candidate data servers based on selection indications received from said candidate data servers (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1),

wherein a selection indication is produced by a candidate data server and is based on selection criteria stored in said candidate data server and on said profile information (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

19. With respect to claim 14, Baxter in view of Gajjar and in further view of Wisner discloses the data storage system of claim 12 wherein said selection indication is a metric that is based on selection criteria and on said profile information (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

20. With respect to claim 15, Baxter in view of Gajjar and in further view of Wisner

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discloses the data storage system of claim 12 wherein said selection indication is a binary indicator that indicates whether or not to copy said first data object to said second data server (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

21. With respect to claim 18, Baxter in view of Gajjar and in further view of Wisner discloses a method for distributing data among a plurality of data storage systems comprising:

obtaining selection criteria in a first data storage system (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1);

producing profile information for a first data object that is stored in said first data storage system, said profile information comprising content-based information associated with said first data object (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1); and

selectively copying said first data object to said at least one second data storage system based on said selection criteria and on said profile information (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1),

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wherein said first data object is copied to said second data storage system depending on content-based information associated with said first data object (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

22. With respect to claim 19, Baxter in view of Gajjar and in further view of Wisner discloses the method of claim 18 further comprising receiving, at said first data storage system, said selection criteria from one or more data storage systems other than said first data storage system (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

23. With respect to claim 20, Baxter in view of Gajjar and in further view of Wisner discloses a data system comprising:

- a plurality of data centers (Gajjar: Figure 1; Wisner: Figure 1); and

- a plurality of client systems in data communication with said data centers (Gajjar: Figure 1; Wisner: Figure 1),

- each data center comprising:

- a data storage component (Gajjar: Figure 1; Wisner: Figure 1);

- a file server component operable to exchange data between a client system and said data storage component (Gajjar: Figure 1; Wisner: Figure 1);

a replicator component (Wisner: Figure 1; Figure 3; Baxter: Figure 1);
a receiver component (Baxter: Figure 1; Wisner: Figure 1); and
file selection criteria (Baxter: Figure 1),

wherein said replicator component is operable to produce profile data for a data object that is to be replicated among one or more candidate target data centers, to communicate said profile data to at least one of said candidate target data centers, to receive a selection indication from each of said candidate target data centers, and to selectively communicate said data object to a candidate target data center based on its selection indication, said profile data representative of content of said data object (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1),

wherein said receiver component is operable to receive profile data information from a source data center, said receiver component further operable to communicate a selection indication to said source data center based on said file selection criteria and on said profile data (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

24. With respect to claim 21, Baxter in view of Gajjar and in further view of Wisner discloses the system of claim 20 wherein said selection indication is an interest metric that is determined based on said file selection criteria and on said profile data, wherein

said replicator component is further operable to communicate said data object to a candidate data center based on its interest metric, wherein said candidate target data centers are ordered to produce an ordered set based on their corresponding interest metrics and said replicator component is further operable to communicate said data object to the first N target data centers selected from said ordered set (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

25. With respect to claim 22, Baxter in view of Gajjar and in further view of Wisner discloses the system of claim 20 wherein said selection indication is an interest metric that is determined based on said file selection criteria and on said profile data, wherein said replicator component is further operable to communicate said data object to a candidate data center based on its interest metric, wherein said replicator component communicates said data object to a candidate target center if its interest metric exceeds a predetermined threshold (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

26. With respect to claim 23, Baxter in view of Gajjar and in further view of Wisner discloses the system of claim 20 wherein said selection indication is an indication of whether or not to communicate said data object to said candidate target data center

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(Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

27. With respect to claim 24, Baxter in view of Gajjar and in further view of Wisner discloses a data system comprising:

a plurality of data centers (Gajjar: Figure 1; Wisner: Item 102, 104 in Figure 1);

and

a plurality of client systems in data communication with said data centers (Gajjar: Figure 1; Wisner: Item 162, 164 in Figure 1),

each data center comprising:

a data storage component (Wisner: Item 134 in Figure 1);

a file server component operable to exchange data between a client system and said data storage component (Wisner: Item 126 in Figure 1);

a replicator component (Wisner: Figure 1; Figure 3);

a collection of selection criteria comprising selection criteria provided from other data centers (Wisner: Paragraph 57, lines 1-14; Figure 1),

wherein said replicator component is operable to produce profile data for a data object that is to be replicated among one or more candidate target data centers, to communicate said profile data to at least one of said candidate target data centers, and to selectively communicate said data object to said candidate target data centers based on said profile data and selection criteria

corresponding to each of said candidate target data centers, said profile data representative of content of said data object (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

28. With respect to claim 25, Baxter in view of Gajjar and in further view of Wisner discloses the system of claim 24 wherein said replicator module is operable to produce based on said collection criteria and on said profile data a plurality of interest metrics, each interest metric corresponding a data center, wherein said candidate target data centers are ordered to produce an ordered set based on their corresponding interest metrics, wherein said replicator component is further operable to communicate said data object to the first N target data centers selected from said ordered set (Baxter: Paragraph 7, lines 1-15; Gajjar: Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

29. With respect to claim 26, Baxter in view of Gajjar and in further view of Wisner discloses the system of claim 24 wherein said replicator module is operable to produce based on said collection selection criteria and on said profile data a plurality of interest metrics, each interest metric corresponding a data center, wherein said replicator component communicates said data object to a candidate target center if its interest metric exceeds a predetermined threshold (Baxter: Paragraph 7, lines 1-15; Gajjar:

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Paragraph 6, lines 1-5; Paragraph 7, lines 1-10; Paragraph 8, lines 1-14; Paragraph 9, lines 1-14; Wisner: Paragraph 57, lines 1-14; Figure 1).

Conclusion

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Shoup reference (US Publication 2002/0147734) teaches about storage policy. The Gupta reference (US Publication 2005/0102273) teaches about interest metrics.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rezwanul Mahmood whose telephone number is (571)272-5625. The examiner can normally be reached on M - F 10 A.M. - 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571)272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Rezwanul Mahmood
Examiner
Art Unit 2164

June 22, 2007


SHAHID ALAM
PRIMARY EXAMINER